

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Steeds on April 9, 2008.

**Claim 1** has been replaced with the following:

#### **Claim 1**

A system embodied on a computer-readable storage medium that facilitates decision tree learning, comprising:

a learning component that generates non-standardized data having a non-zero mean that relates to a split in the decision tree, the non-standardized data related to a statistical model that produced the decision tree; and

a scoring component that assigns a score to the split as if the non-standardized data at a subset of leaves of the decision tree had been at least one of shifted or scaled, the non-standardized data is at least one of virtually shifted through omission of a matrix operation or virtually scaled through the modification of a subset of elements relating to a covariance matrix, the score is employed to evaluate the performance of the statistical model for a data mining application that evaluates personal data.

**Claim 11** has been replaced with the following:

**Claim 11**

A system embodied on a computer-readable storage medium that facilitates decision tree learning, comprising:

means for automatically generating a set of non-standardized data for a statistical model associated with a set or subset of data relating to a continuous variable, the non-standardized data associated with a split in the decision tree and having a non-zero mean; and

means for automatically assigning a score to the split as if the non-standardized data were at least one of shifted or scaled, the non-standardized data is at least one of virtually shifted by omitting a matrix operation from automatically scoring the split or virtually scaled by modifying a subset of elements relating to a covariance matrix, the score is employed to evaluate the performance of the statistical model for a data mining application that evaluates personal data.

**Claim 14** has been replaced with the following:

**Claim 14**

A computer implemented method that facilitates decision tree learning, comprising:

determining whether to perform a virtual shifting operation on a non-standardized set of data with a non-zero mean associated with leaves of a decision tree, the non-standardized data related to a statistical model that produced the decision tree;

determining whether to perform a virtual scaling operation on a non-standardized set of data associated with a non-zero mean associated with leaves of a decision tree, the non-standardized data related to a statistical model that produced the decision tree; and

automatically assigning a score to the split as if the non-standardized data were at least one of virtual shifted or virtual scaled, the virtual shifting operation includes omitting a matrix operation from the assignment of scores and virtual scaling operation includes modifying a subset of elements relating to a covariance matrix, the scores are employed to evaluate the performance of a statistical model that produced the decision tree for data mining application that evaluates personal data.

The following is an examiner's statement of reasons for allowance: claims 1-9, 11-16, and 19-23 are considered allowable since when reading the claims in light of the specification, as per MPEP § 2111.01, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in the independent claims, specifically scoring splits in a decision tree using non-standardized data with a non-zero mean (as defined e.g., P 6, L 19-20), the non-standardized data being at least one of virtually shifted through the omission of a matrix operation (as defined at e.g., P 5, L 23-30 to P 6, L 1-14; P 7, L 9-11; P 10, L 13-17; P 13, L 21-24 to P 14, L 1-4) or virtually scaled through the modification of a subset of elements relating to a covariance matrix (as defined at e.g., P 5 L 23-30 P 10 L 20-26; P 14 L 5-20) and employed to evaluate the performance of the statistical model for a data mining

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application that evaluates personal data (as defined at e.g., P 3 L 19-28; P 7 L 25-28) as disclosed in the independent claims 1, 11, and 14 of the instant application.

A practical application for the invention is disclosed on page 4: "After branches have been scored, evaluation data can be generated indicating how well a model predicts continuous target data and therefore whether or not the model is a suitable predictor for the target data. The evaluation data can then be employed by users and/or subsequent automated components when determining model performance and/or selecting between models or model subsets" and page 7 "As one example, given known data associated with a person (e.g., education level, zip code, web sites visited, shopping selection, and so forth) predications can be made regarding the person's income or age which are possible examples of continuous variables."

The examiner has interpreted computer readable storage medium as being system memory (as defined at e.g., P 15 L 1-7; P 15 L 16-27) and storage media (as defined at e.g., P 15 L 28-29 to L 1-6).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

/David R Vincent/

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